

Figure 1

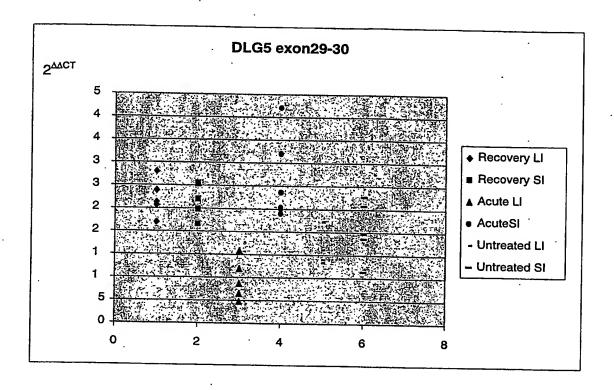


Figure 2

#### Sequence listing:

SEQ ID NO: 1 shows a 7430 base pairs nucleotide sequence of an alternative dlg5 cDNA. Predicted start and stop codons are underlined. The first 328 nucleotides are derived from the novel 5' exon.

5 SEQ ID NO:2 shows the predicted DLG5 peptide sequence of 1919 amino acids SEQ ID NO: 3 shows the sequence of the novel 5' sequence identified for

SEQ ID NO: 4 shows the proposed 5' sequence from EMBL entry AF352034.

SEQ ID NO: 5 shows the putative promoter sequence for dlg5.

10 SEQ ID NO: 189 shows the 7269 base pairs nucleotide sequence of Nterminally truncated dlg5 cDNA. Predicted start and stop codons are underlined. The first 166 nucleotides are derived from the novel 5' UTR

SEQ ID NO: 190 shows the predicted N-terminally truncated DLG5 peptide 15 sequence of 1809 amino acids derived from SEQ ID NO: 189.

## SEQ ID NO:1

GGCGGGGCGCGGCCGCCACC<u>ATG</u>GAGCCCCAGCGCGGGAGCTGCTCGCCCAGTGT CAGCAGAGCCTGGCCCAGGCCATGACGGAGGTGGAAGCCGTGCTCGGGCTGCTCGAGGCC 20 GCGGGAGCGCTCAGTCCCGGCGAGCGGCGCGCGCGCGAGCGCGGAGGCGCGCCCAAG GCGGAGCTGCTCAAGCTGCTCTTGGCCAAGGAGCGGGACCACTTCCAGGACCTGCGG GCGGCGCTGGAGAAGACGCAGCCTCACCTGCTGCCCATTCTCTACCTGAACGGCGTCGTC GGGCCGCCGCAGCCCGAAGGCGCGGGTTCTACCTACAGCGTCCTGTCCACCATGCCC TCAGACTCAGAAAGCAGCAGCTCCCTCAGCAGTGTGGGCACTACCGGGAAGGCGCCGTCC · 25 CCACCACCCCTCACTGACCAGCAAGTGAATGAGAAGGTGGAGAACCTCTCCATTCAG CTGCGGCTGATGACCCGGGAGAGAAACGAGCTCCGCAAGCGCCTTGGCTACGCAT GGCACGGCCTTTGACAAGAGGCCCTACCACAGGCTGAATCCTGACTATGAGAGGCTGAAG ATCCAGTGCGTGCGAGCCATGTCGGACCTGCAGAGCCTGCAGAACCAGCACACCCAACGCC TTGAAGAGGTGTGAGGAGGTGGCCAAGGAGACTGACTTCTACCACACACTCCACAGCCGG 30 CTCCTGAGTGACCAGACTCGGCTGAAGGATGACGTGGACATGCTGAGGCGGGAGAATGGG CAGCTGCTGCGGAGCGAAACCTGCTGCAGCAGTCATGGGAGGACATGAAGCGGCTCCAC GAGGAGGACCAGAAGGAGATCGGTGACCTCCGTGCCCAGCAGCAGCAGGTGTTGAAGCAC AACGGGTCATCCGAGATTCTCAACAAACTGTATGACACGGCCATGGACAAGTTGGAGGTG GTCAAGAAGGACTATGACGCCCTTCGGAAGAGGTACAGTGAGAAAGTCGCCATCCACAAT 35 GCAGACCTGAGCCGCCTGGAGCAGCTGGGGGGAGAACCAGCGGTTGCTGAAGCAGACA GAGATGCTGACCCAGCAGAGGGACACGGCCATCCAGCTGCAGCACCAGTGCGCCCTCTCC CTGAGGAGGTTTGAGGCGATCCACCATGAGCTGAACAAGGCCACGGCGCAGAACAAGGAC

CTGCAGTGGGAGATGGAGCTGCAGTCAGAGCTGACCAGGAGCTGAGAACCACGCAGGTG AAGACAGCAAAGGAGTCGGAGAAATACAGGGAGGAGCGGGACGCTGTGTACAGCGAGTAC 40 AAGCTCATCATGAGTGAGCGTGACCAGGTCATCTCTGAGCTGGACAAGCTGCAGACCGAA GTGGAGCTGGCCGAGTCCAAGCTCAAGAGCAGCACATCTGAGAAGAAGGCGGCCAATGAG GAGATGGAGGCGCTGCGGCAGATCAAAGACACGGTGACAATGGATGCTGGGAGAGCCAAC 

- CTCCAGGAGGCGGATGTGGCCAAGTGCCGGCGGGACTGGGCCTTCCAGGAGCGAGACAAG 45 ATTGTAGCAGAGCGTGACAGCATCCGGACACTGTGTGACAACCTGAGGCGGGAGCGGGAC CGTGCGGTGAGCGAGCTGAGCCCTGCGCAGCAGCAGCAGCAGAAGCAGAAG AATGATGTCAGCCGCGAGCTGAAGGAGCTCAAGGAACAGATGGAATCCCAGTTGGAAAAG GAGGCCCGGTTCCGACAGCTGATGGCCCACAGCTCCCACGACTCGGCCATTGACACGGAT
- TCCATGGAGTGGGAAACGGAAGTTGTAGAGTTCGAGAGGGAGACGGAGGATATTGACTTG 50 AAGGCACTGGGGTTTGATATGGCAGAAGGTGTGAATGAGCCTTGTTTCCCGGGGGACTGT GGCATATTTGTCACTAAAGTGGACAAAGGAAGCATTGCTGATGGCCGCTTAAGGGTCAAT GACTGGCTGCTGAGAATCAACGATGTGGACCTCATCAACAAGGACAAGAAGCAGGCCATC AAGGCGCTCCTCAATGGGGAGGGGCCATCAACATGGTCGTGCGGCGGAGGAAGTCCCTG GGTGGGAAGGTGGTCACGCCGCTGCACATCAACCTCAGTGGACAGAAAGACAGTGGCATC
- 55 AGTCTGGAGAATGGAGTGTATGCTGCCGCTGTGCTGCCTGGAAGCCCTGCCGCTAAAGAA GGGTCCCTTGCTGTGGGAGACAGGATCGTTGCGATCAATGGCATTGCACTGGACAACAAG TCTCTGAATGAATGTGAATCTCTGCTGCGGAGCTGCCAGGACTCCCTGACCCTGTCCCTC CTGAAGGTATTCCCTCAGAGCTCCTCGTGGAGTGGCCAGAACATTTTTGAAAATATCAAA GACTCTGATAAGATGCTGAGTTTTCGAGCCCATGGCCCGGAGGTCCAGGCTCATAACAAA 60 CGGAACTTGATACAGCACAATAACTCCACGCAGACAGCATCTTCTACACGGACAGGCTG

GAAGACAGGAAGGAGCCAGGCCCCCAGGAGGCAGCAGCTCCTTTCTGCATAAGCCATTC CCTGGGGGACCCTTGCAGGTCTGCCCCAGGCCTGTCCCAGTGCCTCTGAGCGTAGCCTG CGGCGGCCACTGCTGCCCTTTGAGACCGAGGTGGGCCCCTGTGGGGGTTGGGGAGGCCTCC CTGGACAAGGCAGACTCTGAAGGCTCCAACAGCGGCGGGACCTGGCCCAAGGCCATGCTC ATCTTTGACCCTAACACTTTCAAACGCCCCCAGACACCCCCCAAAATAGACTACCTGCTT CCAGGTCCTGGGCCTGCTCACTCTCCCCAGCCCTCCAAGAGGGCGGGGCCTCTGACACCC CCAAAACCTCCCAGAAGGAGCGACTCCATTAAGTTCCAGCACAGGCTGGAGACTAGCTCC GAGTCAGAAGCCACTCTGGTGGGCAGCTCCCCATCCACTAGTCCCCGAGCGCCCTGCCC CCTGACGTGGACCCCGGGGAGCCCATGCACGCATCACCCCCTCGCAAGGCCAGGGTCCGC ATTGCTTCCAGCTACTACCCTGAAGGAGATGGGGACTCCTCCCACCTGCCGGCCAAGAAA TCCTGTGATGAGGACCTCACCTCCCAGAAGGTGGATGAGCTGGGGCAGAAGCGTCGCCGG CCAAAATCTGCTCCCAGTTTTCGGCCGAAGCTTGCTCCAGTAGTGATTCCTGCTCAGTTC CTGGAGGAACAGAAGTGTCCCCGGCCAGTGGAGAACTCTCCCCGGAGCTCCAGGAGTGG GCACCTTACTCGCCTGGGCATTCCAGCCGGCACAGCAACCCCCCGCTATACCCTAGCAGG CCGTCTGTGGGCACTGTTCCCCGGAGTTTGACCCCCAGCACCACTGTGAGCTCCATCCTG CGGAACCCCATCTACACTGTGCGCAGTCACAGGGTCGGCCCCTGCAGCTCTCCACCTGCG GCCCGAGATGCTGGCCCCCAGGGTTTGCATCCCAGTGTCCAGCACCAGGGACGCCTGAGC CTGGACCTGAGCCACAGGACCTGCAGCGACTACTCCGAGATGAGAGCCACCCATGGGTCC AACTCACTGCCCTCCAGCGCCCGCCTGGGTTCTTCGAGTAACTTGCAGTTCAAGGCGGAA CGCATTAAAATCCCATCAACACCAAGATATCCGCGGAGTGTCGTGGGCTCCGAGAGAGGT TCAGTGTCACATTCTGAATGCAGCACTCCTCCACAGTCACCCCTGAACATCGACACCCTG TCCTCTTGTAGCCAGTCCCAGACCTCAGCCTCCACATTGCCCAGAATCGCTGTCAACCCC GCGTCCCTCGGGGAGCGGAGAAAGGACAGGCCTTATGTGGAGGAGCCACGCCACGTGAAG GTGCAGAAGGGCTCAGAGCCGCTGGGCATCTCCATCGTGAGTGGAGAAGAGGGCGGCATC TACGTCTCCAAGGTGACCGTGGGGAGCATCGCTCACCAGGCTGGCCTCGAGTATGGGGAT CAGTTACTGGAGTTCAACGGCATAAACCTGCGGAGCGCCCACGGAGCAGCAGCGCGCCTC ATCATCGGGCAGCAGTGTGATACCATCACCATCCTGGCCCAGTACAACCCCCACGTGCAC 30 CAGCTCAGCAGCCACTCCCGGTCCAGCTCACACCTGGACCCTGCCGGTACCCACTCCACT CTCCAGGGCAGTGGCACCACCACCGGAGCATCCATCTGTCATCGACCCACTGATGGAG CAGGACGAGGGGCCTAGCACCCCCCCAGCCAAGCAGCAGCACCTCCAGGATTGCGGGAGAT GCCAACAAGAAGACCCTGGAGCCACGCGTTGTCTTCATCAAAAAGTCCCAGCTGGAGCTT GGGGTGCACTTGTGTGGGGAACCTGCATGGGGTGTTTGTGGCCGAGGTGGAGGATGAC AGTCCTGCCAAGGGTCCTGACGGCCTCGTGCCAGGGGACCTCATCCTGGAGTATGGCAGC CTGGACGTGCGGAACAAGACAGTGGAGGAAGTCTATGTGGAGATGCTGAAGCCCAGGGAT GGTGACAGCTTCTACATCAGGGCCCTGTACGACCGGCTGGCAGATGTGGAGCAAGAGTTG AGCTTTAAGAAGGACGACATCCTCTACGTGGATGACACCTTACCCCAGGGCACGTTCGGG TCCTGGATGGCTTGGCAGCTGGACGAGAATGCCCAGAAGATCCAGCGCGGGCAGATTCCC AGCAAATATGTGATGGACCAAGAATTCTCCAGGAGGCTCAGCATGTCTGAAGTCAAAGAT GACAATAGCGCCACAAAGACGCTGTCAGCGGCTGCACGCCGGTCCTTTTTTCGGAGGAAA CACAAGCACAAACGCAGCGGGTCCAAGGACGGGAAAGACCTGCTCGCCTTGGATGCCTTT TCCAGTGACTCCATTCCACTCTTTGAAGATTCGGTGAGCCTGGCCTATCAGCGGGTCCAG 45 AAGGTGGACTGCACCGCTCTGAGGCCTGTCCTGATTCTGGGGCCCTTTGCTGGACGTGGTG AAGGAGATGCTGGTGAATGAGGCTCCTGGCAAGTTCTGCAGATGTCCCCTTGAGGTGATG AAGGCCTCCCAGCAGGCCATTGAGCGGGGTGTCAAAGATTGCCTGTTTGTCGACTATAAG CGGAGAAGCGGCCATTTCGATGTGACCACTGTGGCGTCAATAAAGGAGATCACAGAAAAG AACCGACACTGCCTCCTGGACATTGCTCCGCACGCTATTGAGCGGCTCCACCACATGCAC ATCTACCCCATTGTCATCTTCATCCACTACAAGAGCGCCCAAGCACATCAAGGAGCAGAGA GACCCCATCTACCTGAGGGACAAGGTGACTCAGAGGCATTCCAAAGAGCAGTTTGAGGCG GCGCAGAAGCTTGAGCAGGAGTACAGCAGGTACTTCACAGGGGTCATCCAGGGAGGAGCC  $\mathtt{TGGATTCCAGCCTGCCCGCTC}_{\underline{\mathbf{TAG}}\mathbf{GAGAATGCTGTGCTGTGGATGACTGCAGCTGGCCGC}$ CTGAGGGGACACCAGACTCAGCTCTTTTCTAGCGACTGAAAGTAGAAGTCTGTCCGTCTA TGAACATGCGGGGGAAGGATCCGGAACCAGGACCCAGAAGCACCTCCTTTGTAGACAGAG GGCCACGGCTGCGTGCGATCCAGGCCCAGGCCCACACACTCTGCCCGTGTCACACGTGTG TGATCAGAGATGCTGCAAAGAGAACCTTTCGGATCACTCGTTTACAAGCCTTTTCTAAGT ATTTGGTGGTTTATGTTTACTTGAACGGCTCCATGTTGCCGGTGCCCAGCCCCTGTCCCC TCTGTCAACCCCTGTCGCTTTGGTGTTGGTTTCGTTCCCGTCTTCAGCAAAACGACCTT GGAACCTCAATGGGGGCTGCTTTGCTTTGGGAGGTTCTTGTTGGTGGGACCAGAGCTTTG ACAAACCTCCTGCTCCTTGGTGGCACCTCTCCTGGAAGGACGTCACAACTCCAGGTGCTC AGACTGCCTGTGGCAGCAGAACCAGTGCCTTTGGCATTTTCCTCCCACAATGGGGAAGGT GACTTTGGCATTCTTACAAACTCGTCTCTCGGCCTTTCTCTCCTGCCTTCCACAGCCTCT CGTTTCTCCTCCATCTGTGCTTATTACTTGAGGACTGTGTCTGCTCCGTGAGAGCTGCGT CTCCTTAGGCTCTGTAAGTCGTGACAGCCTTCATCAGTGCAATGTTTGCAGGGTAATTCT TAAACTTTTTAGAGGGTGGCAGGTACATCAGTTCTTTTTGATATGAAAACATTCATGTTT

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# SEO ID NO: 190

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